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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,282

06/16/2005

Roger Lahille

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04/10/2009

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EXAMINER

PALABRICA, RICARDO J

ART UNIT

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3663

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,282	<b>Applicant(s)</b> LAHILLE ET AL.	
	<b>Examiner</b> Rick Palabrica	<b>Art Unit</b> 3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21, 23, 26-34 and 41-46 is/are pending in the application.
- 4a) Of the above claim(s) 29-32 and 46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21, 23, 26-28, 33, 34, and 41-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. Applicant's 2/3/09 Amendment, which directly amended claims 21, 23, 26-28, 33, and 41, canceled claims 22, 24 and 25, added new claims 45 and 46, and traversed the rejection of claims in the 11/3/08 Office action, is acknowledged.

### ***Election by Original Presentation***

MPEP 821.03 states:

*"Claims added by amendment following action by the examiner, MPEP § 818.01, § 818.02(a), to an invention other than previously claimed, should be treated as indicated by 37 CFR 1.145.*

37 CFR 1.145. *Subsequent presentation of claims for different invention.*

*If, after an office action on an application, the applicant presents claims directed to an invention distinct from and independent of the invention previously claimed, the applicant will be required to restrict the claims to the invention previously claimed if the amendment is entered, subject to reconsideration and review as provided in §§ 1.143 and 1.144."*

2. In the instant case, the examiner is entering the amendment.

Newly added claim 46 is directed to an invention that is independent or distinct from the invention originally claimed for the following reason:

Applicant elected Species C (third embodiment) for examination. New claim 46 recites the limitation, "... the screw acting on thrust rods forming the first clamping means ..." For Species C, the first clamping means is formed by claws 128 not by the thrust rods (see page 31, lines 24+ of the specification).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits.

Accordingly, claim 46 is withdrawn from consideration as being directed to a non-elected invention. Claims 30-32, which are also directed to a non-elected invention, remain withdrawn from consideration. Claims 21, 23, 26-28, 33, 34, and 41-45 are examined in this Office action.

### ***Response to Arguments***

3. Applicant traversed applied art, Yoshikawa et al. (U.S. 6,169,777) on the grounds that: a) their connecting device is separate and not integral with the fastening device; b) their fastening device does not suspend the fuel assembly in the housing at its upper end because "the clamping means is provided along the whole length of the fuel assembly"; and c) they do not disclose securing the fuel assembly in the housing having a smaller cross section compared to the first end.

The examiner disagrees.

As to argument a) there is a plurality of embodiments in Yoshikawa et al. having the claimed integral configuration of the connecting device and fastening device (see detailed discussion in section 7 below).

As to argument b), the claims recite the inclusive, open-ended transitional term "comprising", which is synonymous with "including", "containing", or "characterized by", and does not exclude additional, unrecited elements. See, e.g., MPEP 2111.03 and *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) ("Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a

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construct within the scope of the claim). The fact that Yoshikawa et al. clamp both the upper end AND other parts of the fuel assembly, as applicant himself admits, is objective evidence that their device meets the claimed limitation.

As to argument c), the claims are directed to the subcombination, “fastening device.” The so-called housing is NOT a structural element of the claimed subcombination; instead, it is part of the statement of intended or desired use of the fastening device, as recited, e.g., in the preamble of claim 21”

*“for securing a fuel assembly in a housing of a transport basket, the assembly having a polygonal section and comprising an upper end piece and a lower end piece and the housing having a polygonal section comprising a first open end and a second end.”*

The recitation of further limitations of the housing in the body of the claim, e.g., second end having a smaller cross-section compared to first end, second end having equal dimensions as lower end piece of the fuel assembly, etc, neither provides a structural limitation to the claimed subcombination nor change the status of the housing as being part of the statement of intended or desired use. Nevertheless, the Yoshikawa et al. apparatus is capable of being used for the alleged housing because their fastening device can be disposed on the outer surface of said housing.

4. Applicant traversed applied art Gilmore et al. on the grounds that they do not “expressly or inherently disclose that claw mechanism is engageable to an upper end piece of the transport housing and moves along with the control device in the longitudinal axis in response to the control device rotated in the first direction, as recited in claim 41.”

The examiner disagrees.

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The amendments to claim 41 necessitated a different interpretation of the device of Gilmore et al. As shown in section 8 below, said applied art still meets the amended claims.

5. Applicant traversed the examiner's use of Gilmore et al. for the rejection of claims under both 35 U.S.C. 102 and 103. Applicant asserts that,

*"the Examiner has not explained how the claims are anticipated in that all their elements and limitations are disclosed in Gilmore (under the requirements of §102) and then are also obvious in the light of Gilmore (under the requirements of §103)."*

The examiner disagrees.

Applicant recited claim 41 as:

*"wherein the claw mechanism engages an upper end piece of the transport housing ..."*

which was cited by the examiner in section 4 of the 11/3/08 Office action as improper and rejectable under 35 U.S.C. 112, second paragraph. The examiner then rejected the claim under 35 U.S.C. 102, based on interpreting the claim as being intended by the applicant to read "engageable" instead of "engages". The examiner then proceeded to reject the claim, as recited (even if improper), based on 35 U.S.C. 103. Note in this regard the following statement by the examiner in said Office action:

*"As to claims 41-44, the examiner indicated that these claims are anticipated by Gilmore et al., based on the interpretation of the claw mechanism being "engageable" NOT "engages" an upper end piece. If applicant is of a different opinion, the claims are still unpatentable over Gilmore et al. because their apparatus can be applied or adapted to have the means for making a rigid connection (i.e., nozzle holder 66) provide said connection between an upper end piece of a fuel assembly and an open housing of a transport container."*

The examiner's rejection of the claims under both §102 and §103, and based on the same applied art, is consistent with MPEP 2106.II, which states:

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*"It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application." Underlining provided.*

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 21, 23, 26-28, 33, 34 and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites in the preamble the subcombination of a "fastening device" that is inconsistent with the body of the claim that recites limitations directed to the combination of the fastening device and fuel assembly. Note the limitation, "connecting device placed above the upper end piece of the fuel assembly", which limitation positively recites the upper end piece, and defines the connecting device in terms of the position of the upper end piece, whose dimensions are undefined in the claim. This inconsistency presents the question as to whether the claim recites a combination or subcombination. There is insufficient antecedent basis for the limitation that is directed to the combination rather than to the subcombination because a fuel assembly is not an inherent component of a fastening device.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 21, 23, 26-28, 33, 34 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Yoshizawa et al. (U.S. 6,169,777), who disclose an apparatus for transporting nuclear fuel assemblies, including a device for blocking a fuel assembly in a housing of a transport basket.

In the following sections, the examiner interprets the claims as having the connecting device disposable (i.e., capable of being placed) above the upper end piece of the fuel assembly.

As to claim 21, applicant's claim language reads on Yoshizawa et al. as follows (e.g., see Fig. 5): a) "connecting device" reads on fastening plates 15; b) "fastening device" reads on the combination of drive mechanism 17, rotating shaft 18 and control shaft 19.

Note that the connecting device is integral with the fastening device, and the uppermost connecting device 15 has a portion disposable above the upper end piece 38 of the fuel assembly 35.

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "for securing a fuel assembly in a housing of a transport basket ...", etc. These clauses, as well as other



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statements of intended use do not serve to patently distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. (Note also that “housing” and “fuel assembly” (e.g., in claims 21 and 23) are parts of the statement of intended or desired use of the fastening device).

See MPEP 2111-2115. See also MPEP 2114 that states:

A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The system in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited reference.

As to claims 21, and 26-28, the recitation that an element is “configured to” perform or “configured for” performing a function does not constitute a limitation in any patentable sense, i.e., it only requires the capability to perform (e.g., see *In re Hutchison*, 69 USPQ 138 69 USPQ 138, or *National Presto Indus. V. West Bend Co.*, 76 F.3d 1185 (Fed. Cir. 1996). The apparatus in the cited reference enables or permits the function recited in the claims to take place, and therefore meets the claim limitation.

As to claim 23, see, for example, Fig. 10.

As to claim 27, applicant's "means for transverse displacement" reads on the combination of drive mechanism 17 and the second fastening plate 15 (from the top) in Yoshizawa et al., which is capable of moving the upper end piece 38 towards the two adjacent faces of the housing 12 and away from them (e.g., see Fig. 7 and col. 14, lines 60+).

As to claim 28, applicant's "means for axial displacement" reads on the combination of drive mechanism 17 and the lowermost fastening plate 15 in Yoshizawa et al., which is capable of moving the assembly away from the second end of the housing and towards the second end (e.g., see Fig. 17). Note that when the lowermost plate is retracted, fuel assembly 35 is on the thicker part of base 25 of the housing, the fuel assembly is away from the bottom end of the housing. When the lowermost plate is fully extended, the fuel assembly rests on the thinner portion of base 25 and near the bottom of the housing.

As to claim 33, applicant's claim language reads on Yoshizawa et al. as follows:  
a) "first clamping means" reads on topmost fastening plate 15; b) "control device" reads on drive mechanism 17; c) "second clamping means" reads on the support 14 shown on the top of the housing in Fig. 9.

As to claim 34, applicant's claim language, "screw", reads on shaft 19.

As to claim 45, applicant's claim language, "control device" reads on the motor that drives shafts 18, 19 (see Fig. 5).

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8. Claims 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Gilmore et al, who disclose a connecting device adapted for use with a transport housing.

Applicant's claim language reads on Gilmore et al. as follows (e.g., see Figs. 1-11): a) "clamping member" reads on clamping frame assembly 52,54 (see 6A); b) "control device" reads on screw 266 (see Fig. 9 and col. 13, lines 18+); c) "claw mechanism" reads on blocking surfaces 288, 290, 292 (Fig. 9 and col. 13, lines 47+).

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "adapted for use with a transport housing ...", "vertically moves along the longitudinal axis upon being rotated in a first direction", etc. These clauses, as well as other statements of intended use do not serve to patentably distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525,1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

Also, the recitation that an element is “adapted to” perform a function does not constitute a limitation in any patentable sense, i.e., it only requires the capability to perform (e.g., see *In re Hutchison*, 69 USPQ 138 69 USPQ 138).

The apparatus in the cited reference enables or permits the function recited in the claims to take place, and therefore meets the claim limitation.

The control device (i.e., screw 266) in Gilmore et al. is capable of moving vertically along the longitudinal axis, e.g., when the apparatus is oriented vertically. Note also that the claw mechanism (i.e., blocking surfaces 288,290,292) is capable of moving along with the control device (i.e., screw 266) in the longitudinal axis in response to the control device being rotated in the first direction, as evidenced by the following:

*“The plate 250 provides both cam and wedge functions. When the three contoured cam surfaces 260,262,264 are moved relative to the corresponding grippers 238, a displacement profile engages (or disengages) the grippers 238. Additional torquing of the screw 266 causes the plate 250 to rotate to the fully open position. When the recess holder 70 is in the fully open position, the plate 250 functions as a wedge. Torquing of the screw 266 pulls or forces the plate 250 toward the base 244.” Underlining provided. See col. 13, lines 54+.*

Plate 250 includes the claw mechanism, i.e., blocking surfaces 288,290,292.

As to claims 42-44, applicant’s claim language reads on Gilmore et al. as follows (see Fig. 8): a) “pin guide” reads on hole 74 (see also col. 12, lines 4+); f) “nut” reads on locking collar 268..

Again the recitation that an element is “configured to” perform a function is not a positive limitation but only requires the ability to perform, i.e., it does not constitute a limitation in any patentable sense. Note that the configuration of the lower nozzle in

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Gilmore et al. is essentially similar to the upper end piece of a fuel assembly of a light-water cooled reactor (e.g., a PWR).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/  
Primary Examiner, Art Unit 3663

April 9, 2009